THE IMMIGRATION OF LEPIDOPTERA TO THE BRITISH ISLES IN 1994

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ALTHOUGH 1994 WAS a noticeable improvement on the previous year in terms of both the range of species recorded and number of records received, it could in general terms be classified only as an average year for migrants. As in past years the first reports of the commoner butterflies and moths were in March and April, but then only in very small numbers. May witnessed a handful of Delicate *Mythimna vitellina* (Hübner) in the West Country and very little else with the notable exception of a single Striped Hawk-moth *Hyles livornica* (Esper) in Sussex on the 5th and a Water Betony *Shargacucullia scrophulariae* ([Denis & Schiffermüller]) at Swanage, Dorset, on the 18th. The latter probably constitutes only the second authenticated record of this species in Britain; the first having been taken in 1949, also at Swanage.

June and most of July were mostly uneventful; a welcome exception was an example of The Orache *Trachea atriplicis* (Linnaeus) attracted to light in south-east Kent on 3rd July. This species, a former resident, but last reported in 1915, reappeared as a probable migrant in 1986 since when seven individuals have been recorded in the south-eastern quarter of England. Two specimens, the first for England, of the pyrale *Evergestis limbata* (Linnaeus) were reported from the Isle of Wight towards the end of July. The following months brought the common and less common, but generally not the rare, migrant species normally associated with late summer and autumn which arrived regularly in average numbers. The most notable captures during this period were two male Pale Shoulder *Acontia lucida* (Hufnagel) both on the same night, but at light traps over 100 miles apart in Kent and Dorset. This species, of which less than ten examples have previously been reported in Britain, was last recorded in 1880.

In the hope of aiding the compilation of the migrant reports for future years and enabling a quicker publication it is requested that records should be stated clearly with as full details as possible and ideally the Watsonian vice-county should be given. If it is not possible to give the vice-county, a six figure grid-reference would aid the placing of the record within a vice-county at the compilation stage. The dates given for the records should be the day of the sighting, or if from a light trap it should be the date of the evening that the trap was operated. If the date given with the records is for the following morning, this should be stated clearly so that the records could be suitably amended to ensure a consistent approach.

The species listed in the annexes are laid out following Bradley & Fletcher (1979), although the nomenclature has been updated utilising Karsholt & Razowski (1996). Several records were supplied by more than one contributor and it is possible that some duplication of records has occurred, although every effort was made to eliminate this. Little attempt has been made to interpret locality data and it is possible that the same site is occasionally treated by different names. Records placed

in square brackets either require confirmation, are known to be releases or, in the case of the Cypress Carpet *Thera cupressata* (Geyer), are of individuals that are considered to be resident but are included for interest. The abbreviations listed below are used in Annex 1.

Abbreviations

- I Primary immigrants
- R Resident
- R(i) Recent resident/Invader
- R(t) Temporary resident
- V Vagrant/wanderer

ANNEX 1: RECORDS OF "SCARCER" SPECIES

YPONOMEUTIDAE

Yponomeuta evonymella (Linnaeus) [I?] SOUTH-EAST YORKSHIRE (61): Spurn Head, 24.7 - 3; 25.7 (BS).

Y. rorella (Hübner) [I?/V?] DORSET (9): Gaunt's Common, 8 (per PD).

ETHMIIDAE

Ethmia bipunctella (Fabricius) [I?/V?]

DORSET (9): Weymouth, 3.8 (Sterling & Sterling 1995); SOUTH HAMPSHIRE (11): Southsea, 31.7 (J.R. Langmaid per Agassiz *et al* (1996)).

TORTRICIDAE

Cydia amplana (Hübner) [I?] DORSET (9): Portland Bird Observatory, 30.7 (MC).

PYRALIDAE

Euchromius ocellea (Haworth) [I/E?]

WEST CORNWALL (1): Perrancombe, Perranporth, 22.12 - 1 recently dead male on indoor windowsill (FHNS, see also Smith (1995)); St. Agnes, Isles of Scilly, 13.8 (JH & MH, see also Smith (1995)).

Pediasia fascelinella (Hübner) [I]

EAST KENT (15): Dungeness, 30.7 (SPC, see also Clancy (1995c)); Dymchurch, 2.7 (JO per Clancy (1995c)).

Evergestis limbata (Linnaeus) [I] ISLE OF WIGHT (10): Chale Green, 23.7; 30.7 (Colenutt 1995).

E. extimalis (Scopoli) [I?/V?]

Note: Records outside Thames estuary and Breckland only.

DORSET (9): Gaunt's Common, 8 (per PD); ISLE OF WIGHT (10): Chale Green, 30.7 (Colenutt 1995); Godshill, 24.8 (Cramp 1995); EAST SUSSEX (14): Norman's Bay, undated (Simmons 1995b); KENT: Coast, exact locality not given, 24.9 (Porter 1995b); EAST KENT (15): Sandwich Bay Bird Observatory, 4.8; 25.9 (ACJ); Sholden, Deal, undated (TB).

Sitochroa palealis ([Denis & Schiffermüller]) [I?/R?/R(t)?]

SOUTH DEVON (3): Starcross, 5.8; 6.8; 7.8 (AHD); DORSET (9): Portland Bird Observatory, 13.7 (MC); ISLE OF WIGHT (10): Compton Down, 21.7 - 1 by day (SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, 3.8 (BIJ per BG); Havant, 7.7 (per BG); Matley Grange, 10.7 (P.A. Budd per BG); EAST KENT (15): Dungeness, 13.7 (SPC); Greatstone, 24.7 (BB per SPC); Sholden, Deal, undated (TB); Whitstable, 25.7 (Bradford 1995b); BERKSHIRE (22): Milton Hill, nr. Didcot, 3.8 (Easterbrook 1995).

Summary: (3): 3; (9): 1; (10): 1; (11): 3; (15): 4; (22): 1.

Ostrinia nubilalis (Hübner) [I?/R?]

Note: Records outside Thames estuary only.

WEST CORNWALL (1): Cadgwith, 1.9 (JHC); Ruan Minor & Cadgwith, 31.8 - 2 females (JHC); SOUTH DEVON (3): Abbotskerswell, 25.9 - 2 (BPH); East Prawle, 26.9; 27.9 (BRB per Agassiz *et al* (1996)); SOUTH SOMERSET (5): Porlock, 28.6 (JR per Agassiz *et al* (1996)); DORSET (9): Portland Bird Observatory, 13.7 to 15.7 - 4; 6.9 (MC); ISLE OF WIGHT (10): Chale Green, 12.7 -2; 22.7; 23.7; 25.7 - 3; 27.7; 1.8; 25.9; 26.9 (SC per SAKJ); 30.7 (Colenut 1995); Freshwater, 23.8 (SAKJ); SOUTH HAMPSHIRE (11): Christchurch, 3.7 - 2 (per PD); NORTH HAMPSHIRE (12): Selborne, 20.7 (AEA); EAST SUSSEX (14): Peacehaven, 24.6 - 2; 3.7; 11.7; 12.7 - 3; 14.7; 15.7; 31.8; 24.9 (CRP); WEST NORFOLK (28): Cranwich Camp, 18.7 (BFS per Agassiz *et al* (1996)); DERBYSHIRE (57): Alveston, 27.6 (I. Travers-Ayre, per Agassiz *et al* (1996)). Summary: (1): 3; (3): 4; (5): 1; (9): 6; (10): 13; (11): 2; (12): 1; (14); 11; (28): 1; (57): 1.

Udea fulvalis (Hübner) [1?/R(t)]

ISLE OF WIGHT (10): Chale Green, 30. 7 (SC per SAKJ); Freshwater, 17.8 (SAKJ); SOUTH HAMPSHIRE (11): Christchurch, late 7 - several at light and on flowers of Buddleia at night (M. Jeffes per BG); 4.8 - 4 (BG).

Maruca vitrata (Fabricius) (=testulalis (Geyer)) [I?/E?]

SOUTH ESSEX (18): Bradwell-on-Sea, 21.7 (AJD).

Palpita unionalis (Hübner) [1]

DORSET (9): Swanage, 4.11 (RC per DB); SOUTH HAMPSHIRE (11): Beaulieu, 26.11 (BIJ per BG); WEST SUSSEX (13): Walberton, 3.11 - 2; 4.11; 7.11; 11.11; 18.11; 20.11 (JTR per CRP); EAST KENT (15): Dungeness Bird Observatory, 29.9 (per SPC); Lydd, 4.11 (KR per SPC); KENT: Coast, exact locality not given, 24.9 (Porter 1995b); WEST KENT (16): Tonbridge, 3.11 (Anon.); WARWICKSHIRE (38): Charlecote, 4.11 (AG per DB); CHANNEL ISLANDS (113): Guernsey, St. John, 27.9 (Austin 1994).

Summary: (9): 1; (11): 1; (13): 7; (15): 2; Kent: 1; (16): 1; (38): 1; (113): 1.

[Sciota adelphella (Fischer von Roslerstamm) [R?/R(t)?/R(i)?]

Skinner (1995a) reviews the history and present status of the species in Great Britain. Based on sightings in 1994 he suggests that the species was "possibly established in at least four localities, Greatstone, Littlestone, Dymchurch and New Romney" (all EAST KENT (15)).]

Dioryctria abietella ([Denis & Schiffermüller]) [1?/V?/R?]

DORSET (9): Portland Bird Observatory, 4.7 to 27.7 - 8 (MC); NORTH HAMPSHIRE (12): Farnborough, 21.7 - 2; 4.8 (RWP); EAST KENT (15): Dungeness, 28.6 - 2; 2.7; 4.7; 10.7; 12.7; 13.7 - 3; 21.7 - 5; 22.7; 31.7 (KR per SPC); Dungeness Bird Observatory, 26.7 (per SPC); Dymchurch, 21.7 (JO per BFS); Greatstone, 20.7; 24.7 (BB per SPC); Littlestone, 3.7; 10.7; 11.7; 12.7; 13.7; 15.7; 21.7; 22.7; 24.7; 26.7; 30.7 (KR per SPC); Lydd, 3.7; 12.7; 13.7; 14.7; 15.7; 20.7; 24.7; 25.7; 26.7; 27.7; 1.8; 3.8; 5.8; 6.8; 12.8 (KR per SPC); New Romney, 28.6; 3.7 - 2; 7.7; 10.7; 12.7; 15.7; 21.7; 24.7; 25.7; 26.7; 28.7; 30.7; (KR per SPC); Sandwich Bay Bird Observatory, 1.7; 2.7; 13.7; 15.7; 18.7; 24.7 (TB); Sholden, Deal, 11.7; 18.7; 25.7 (TB); Whitstable, 19.7 (Bradford 1995b); SOUTH-EAST YORKSHIRE (61): Spurn Head, 24.7 - 4 (BS); Tophill Low, 27.7 (PAC); [SHETLAND ISLES (112): Cullivoe, 8.8 - record requires confirmation (per MGP)]. Summary: (9):8; (12): 3; (15): 69; (61): 5; [(113): 1].

D. simplicella Heinemann (=mutatella Fuchs) [I?/V?]

DORSET (9): Portland, 18.7 (per PD).

Conobathra tumidana ([Denis & Schiffermüller]) [I]

DORSET (9): Gaunt's Common, 8 (per PD); SOUTH HAMPSHIRE (11): Christchurch, 4.8 (Skinner 1995b); WEST SUSSEX (13): Pagham, 11.8 (BFS, see also Skinner (1995b)); Walberton, 5.8 (JTR per CRP).

Mussidia nigrivenella Ragonot [I]

EAST KENT (15): Dungeness Bird Observatory, 10.8 - 1 female (record previously published in error as 12.8 in Clancy (1995a)) (per SPC).

Ancylosis oblitella (Zeller) [I?/R(t)?/R?]

WEST SUSSEX (13): Walberton, 30.7 (JTR per CRP); CAMBRIDGESHIRE (29): Mepal, Ely, 1.7 (R. Partridge per Agassiz *et al* (1996)).

PAPILIONIDAE

The Swallowtail Papilio machaon Linnaeus [In/I?]

Note: Subspecies was not stated for the following records.

SURREY (17): Redhill, 7.8 (S. Gale per GAC); [CAMBRIDGESHIRE (29): Girton, 30.7 (per CCS, see also Sparks (1995)); 10.8 (per CCS); 17.9 - larva, (4 to 5 caterpillars had previously been found feeding on cultivated dill *Anethum graveolens* and parsley *Petroselinum crispum*) (Sparks 1995). Gardiner (1995) considers the Girton examples to have originated from a escapee from a captive breeding colony of subspecies *gorganus*; LEICESTERSHIRE (55): Loughborough, 2.9 (a possible release?) (A. Knight)]; SHETLAND ISLES (112): Voe, 2.8 - 1 found dead by road (T. Baldwin per Pennington (1996)).

PIERIDAE

Pale Clouded Yellow Colias hyale (Linnaeus) [I]

CORNWALL: Exact locality not given, 27.8 (G. Sutton per NB, see also Bowles (1994c)).

[Berger's Clouded Yellow C. alfacariensis Ribbe [I]

SOUTH DEVON (3): Near Two Bridges, Dartmoor, 27.8 - 1 male (Mrs J.C. Cox) (record unconfirmed).]

Clouded Yellow C. croceus (Fourcroy) [I]

Summary only: The vice-county number is given in brackets, followed by the number of individuals sighted in each vice-county. Where no numbers were given for an individual record, it was taken to be one. For some records the numbers given were approximate, therefore the totals given below are approximate and serve to give an indication of numbers recorded. This is followed by the monthly representation of the records. In a few cases it was impossible to assign a given record to an individual month. These records were ignored. As with the totals for the vice-counties, the monthly totals are approximate.

Cornwall: 1 (+larvae); Truro area: 5; South Cornwall: 10+; (1): 23; (2): 71+; Devon: 232* (+larvae); (3): 239+; (4): 6; (5): 3; (6): 5; (7): 1; (8): 3; (9): 261+; (10): 154+; (11): 14; (12): 1; Sussex, Brighton: 2; Burgess Hill: 1; (13): 120; (14): 141+; (15): 29; (16): 5; (17): 9+; (18): 1; (23): 4; (28): 1; (38): 2; (39): 2; (44): 25+; (45): 1; (56): 7; (61): 2; (72): 1; (73): 1; (113): 17; (H5): 1; (H38): 1.

June: 15; July: 96+; August: 352+; September: 161+; October: 128 (+larvae); November: 7; December: 1.

Earliest date: 1.6, Portland, Dorset (9) (MC).

Latest date: 15.12, Dawlish Warren, South Devon (3) (J. Fortey per Bristow (1995)).

* Total given for Devon comes from Bristow (1995) and includes records given under the totals for VCs 3 and 4.

Bath White Pontia daplidice (Linnaeus) [I]

DEVON: Exact locality not given, 29.7 - 2 (R. Jewell per NB, see also Bowles 91994c)).

LYCAENIDAE

[Short-tailed Blue Cupido argiades Pallas [I]

EAST KENT (15): Rochester, 16.6 (W.L.M. Mulhall per NB, see also Bowles (1994c))].

NYMPHALIDAE

[Large Tortoiseshell Nymphalis polychloros (Linnaeus) [I?]

Locality not given, late 3 - several, after hibernation (Bowles 1994a) (a possible release (per NB))].

Camberwell Beauty N. antiopa (Linnaeus) [I]

WEST SUSSEX (13): Selsey, 24.9 (S. Jupp per CRP); EAST SUSSEX (14): Plumpton, early 6 (T. Smith per CRP); SURREY (17): Bletchingly, 3.8 (Mrs S. Ruck per GAC); EAST SUFFOLK (25): Diss, 8 (K. Young per NB); WEST NORFOLK (28): Wells, 2.9 (D. Holman per NB, see also Bowles (1994d)); east of Wells, 3.9 (S. Stirrup per NB, see also Bowles (1994d)); west of Wells, 3.9 (D. Holman per NB, see also Bowles (1994d)); WORCESTERSHIRE (37): Hartlebury near Stourport, 21.1 - discovered by a woodyard workman, flying (after hibernation) in late 4 (per NB, see also Bowles (1994a)); NOTTINGHAMSHIRE (56): Harlow Wood, nr. Mansfield, 5.9 (Ms A. Evans per SW); NORTH YORKSHIRE: Exact locality not given, 1.8 (Bowles 1994c).

Queen of Spain Fritillary Argynnis lathonia (Linnaeus) [I]

Bristol, 22.8 (per NB, see also Bowles (1994c)); STAFFORDSHIRE (39): Locality not given, 5.9 (per T. Beynon).

The Monarch Danaus plexippus (Linnaeus) [I]

DORSET (9): Worth Matravers, undated (C. Nunn per NB); EAST SUSSEX (14): Keymer, 11.9 (M. Legrys per CRP, see also Dey (1995)); Seaford, 21.8 (B. Reed per CRP); WEST KENT (16): Beckenham, 25.7 (M. Keen per Sokoloff (1994)); Staplehurst, 1.8 (K. Derret per NB); SOUTH SOMERSET (5): Linstock, 21.9 (B.J. Hill per BES, see also Slade (1995)); NORTH SOMERSET (6): Berrow, 2.9 (A.M. Slade & Mrs. B. Slade per BES, see also Slade (1995)); SUFFOLK: Exact locality(s) not given, 8 - 2 (Bowles 1995) (one was from EAST SUFFOLK (25): Blyth Estuary, 3.8 (R. Stewart per NB)); EAST NORFOLK (27): Eaton, 29.8 (per NB); DERBYSHIRE (57): Arkwright, 22.9 (Frost 1995).

GEOMETRIDAE

Sub-angled Wave Scopula nigropunctata (Hufnagel) [I]

ISLE OF WIGHT (10): Freshwater, 5.8 (SAKJ, see also Knill-Jones (1995b)).

Tawny Wave S. rubiginata (Hufnagel) [I]

DORSET (9): Portland Bird Observatory, 11.8 (MC); SOUTH HAMPSHIRE (11): Christchurch, 5.8 (Jeffes 1995); WEST SUSSEX (13): Walberton, 11.8 (JTR per CRP); EAST KENT (15): Dungeness Bird Observatory, 12.8 (per SPC, see also Clancy (1995a)); Lydd, 4.8 (KR per SPC); Sholden, Deal, 31.7 (TB per BFS).

Bright Wave Idaea ochrata (Scopoli) [I]

DORSET (9): Portland Bird Observatory, 14.7 (MC).

Least Carpet I. rusticata ([Denis & Schiffermüller]) [I?/R?/R(t)?]

ISLE OF WIGHT (10): Chale Green, 6.8 (SC per SAKJ); 30.7 (Colenutt 1995).

The Vestal Rhodometra sacraria (Linnaeus) [I]

WEST CORNWALL (1): St. Agnes, Isles of Scilly 6.7; 11.8; 12.8 - 2; 13.8 - 3; 15.8; 1.9 (JH & MH); 23.8 (RJH); SOUTH DEVON (3): Abbotskerswell, 6.6 (BPH); Dunsford, 21.8

(JW & JW²); Starcross, 7.8; 22.8 - 2; 28.8 (AHD); Teignmouth, undated (McCormick 1995); SOUTH SOMERSET (5): Stoke Trister, undated (JB per KB); West Luccomb, Porlock, 4.8 (JR); NORTH SOMERSET (6): Westonzoyland, 25.7; 30.8 (DM per KB); DORSET (9): Locality not given, 30.7; 8 to 14.10 - 2 (per PD); Portland, 5.8 - 2 (BFS); Portland Bird Observatory, 8.7; 3.8 to 14.8 - 6 (3 of which were on 14.8); 7.11 (MC); Slepe Heath, Arne, 5.8 - 1 male; 6.8 - 2 (JHC); Wimborne, 7.8 (MB); Woolgarston, Corfe Castle, 5.8; 11.8; 13.8 (DB²); ISLE OF WIGHT (10): Binstead, 6.8; 7.8; 10.8; 15.8; 19.8; 20.8; 22.8; 23.8 (BJW); Chale Green, 4.8; 6.8; 11.8 - 2; 21.8; 23.8 (SC per SAKJ); Freshwater, 1.8; 5.8; 12.10 (SAKJ); 30.7; 4.8; 13.8 (DBW per SAKJ); St. Helens, 26.7 (P.J. Cramp per SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, 12.7; 22.8; 2.9; 9 to 18.10 - 7; 24.10 (BIJ per BG); Chandlers Ford, 22.8 (BG); Havant, 22.8 (BC); Sparsholt, 6.8; 11.8 - 2 (RAB); Sparsholt College, 5.8 (AHD); NORTH HAMPSHIRE (12): Farnborough, 1.7 (RWP); Selborne, 4.7 (Aston 1995); WEST SUSSEX (13): Hassocks, 29.8 (DD per CRP); Pagham Harbour, 23.8 - 10 (BFS); 30.8 - 2 (SC² per CRP); Thorney Deeps, 20.8 - 1 by day (BC); Walberton, 29.7; 4.8; 5.8 - 2; 6.8; 7.8; 10.8; 23.8 - 4; 24.8 - 2; 25.8 - 2; 29.8 - 2; 30.8; 31.8; 2.9; 3.9; 25.9; 21.10; 9.11 (JTR per CRP); EAST SUSSEX (14): Crowborough, undated (Simmons 1995a); Icklesham, 10.8; 22.8; 24.9 (IH per CRP); Peacehaven, 5.8 - 3; 8.8; 12.8; 14.8; 17.8; 19.8 - 2; 22.8 - 5; 23.8; 27.8; 30.8 - 2; 31.8; 2.9; 6.9 (CRP); EAST KENT (15): Child's Forstal Wood, 29.8 (Bradford 1995a); Densole, 4.8 - 1 male; 22.8 - 1 male (TR); Dungeness, 5.8 (KR per SPC); 22.8; 25.8 (SPC); Dungeness Bird Observatory, 4.8 (per SPC); Dymchurch, 10.8; 23.9 (JO per BFS); Folkestone Warren, 22.8 - 1 male & 1 female (TR & DB); Greatstone, 8.6; 13.8; 22.8 (BB per SPC); Lydd, 30.7; 1.8; 12.8 (KR per SPC); Nagden Marshes, 22.8 (MSP); New Romney, 2.8; 5.8; 12.8 (KR per SPC); Sandwich Bay Bird Observatory, 1.8; 22.8; 30.8 - 2 (ACJ); Sholden, Deal, 4.8; 6.8; 22.8 (TB); Whitstable, 24.8 (Bradford 1995a); SURREY (17): Buckland, Betchworth, 21.8; 22.8 (CH); Lingfield, 21.8 - 3 (JHC); Richmond Park, 6.8 (D. Coleman per GAC); Wisley, 19.8 (A.J. Halstead); SOUTH ESSEX (18): Bradwell-on-Sea, 3.7 - 1 female; 7.7 -1 male; 22.8 - 1 male; 27.8 - 1 male; 6.9 - 1 male (AJD); 31.7 - 1 female; 7.8 - 1 male; 19.8 - 1 female; 23.8 - 1 male; 26.8 - 1 female; 3.9 - 1 female; 4.9 - 1 female; BERKSHIRE (22): Mortimer West End, Reading, 23.8 - 2 (GD); Slough, 6.8 (Haywood 1995); OXFORDSHIRE (23): Long Wittenham, Abingdon, 29.7; 10.8; 23.8; 24.8 (DO); BUCKINGHAMSHIRE (24) Willen, Milton Keynes, 1.8 (GEH); BEDFORDSHIRE (30): Ampthill Park, 18.8 (Manning 1995); WEST GLOUCESTERSHIRE (34): Welshbury Wood, 1.7 (R. Barnett per RG); WARWICKSHIRE (38): Bidford-on-Avon, 4.8 (RC per DB); Charlecote, 4.8; 27.8 (DB); Rugby, 7.8 (Dr D. Porter per DB); CARMARTHENSHIRE (44): Erw-las, Llwynhendy, 8.8 (BS2 per IKM); Penrhyngwyn, 4.8 (BS² per IKM); NOTTINGHAMSHIRE (56): Abbey Wood, Newstead Abbey Park, 8.8 (K.V. Cooper per SW).

Summary: (1): 10; (3): 7; (5): 2; (6): 2; (9): 19; (10): 22; (11): 17; (12): 2; (13): 38; (14): 25; (15): 29; (17): 7; (18): 12; (22): 3; (23): 4; (24): 1; (30): 1; (34): 1; (38): 4; (44): 2; (56): 1.

The Gem Orthonoma obstipata (Fabricius) [I]

WEST CORNWALL (1): Cadgwith, 31.8 - 1 male (JHC); Lamorna Cove, 22.10 (MT per DB); Lizard Point, 21.10 - 2 (MT per DB); Praze-an-Beeble, Camborne, 10.11 (AS); St. Agnes, Isles of Scilly, 3.3; 18.7; 23.7; 12.8; 13.8 - 2; 14.8; 20.8; 29.8; 11.10; 12.10 - 2; 15.10; 22.10; 5.11 - 2; 10.11; 17.11; 24.11; 27.11 - 3; 15.12 (JH & MH); SOUTH DEVON (3): Abbotskerswell, 25.9; 17.12 (BPH); DORSET (9): Durlston Country Park, 5.11 (DB); Portland Bird Observatory, 14.10; 4.11 (MC); Swanage, 5.11 (DB); Woolgarston, Corfe Castle, 7.8; 10.10; 23.11; 24.11 (DB²); ISLE OF WIGHT (10): Chale Green, 9.7; 6.11; 21.11 - 3; 22.11; 23.11 (SC per SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, 4.8 - 1 female; 13.9 - 1 female; 19.10; 23.10 - 1 female (BIJ per BG); Fareham, 13.6 (RJD per BG); SUSSEX: Brighton, 29.10 (SC² per CRP); WEST SUSSEX (13): Pagham Harbour, 4.11 (DB); Walberton, 29.10; 3.11; 4.11; 6.11 - 2; 7.11; 9.11; 14.11; 20.11; 22.11 (JTR per CRP); EAST SUSSEX (14): Peacehaven, 21.7 - 2; 7.11; 9.11; 14.11; 20.11; 22.11 (JTR per CRP); EAST SUSSEX (14): Peacehaven, 21.7 - 2; 7.11; 9.11; 14.11 - 2 (CRP): [7.9 (CRP per Waring (1994b))]; EAST KENT (15): Dungeness, 11.11 - 2 (SPC); Dungeness Bird Observatory, 5.11; 10.11 - 6; 12.11; 16.11 (per SPC); Dymchurch, 10.11 - 3 (JO per BFS); Greatstone, 7.11; 10.11 - 2; 11.11; 21.11; 22.11 (BB per SPC); Lydd, 4.11; 9.11; 10.11; 11.11; 12.11 (KR per SPC); Sandwich Bay Bird Observatory, 6.11; 9.11 - 6; 11.11 - 2 (ACJ); Sholden, Deal, 31.7; 28.9; 11.11 - 4; 18.11 (TB); SURREY (17): Buckland, Betchworth, 8.11 (CH); Lingfield, 7.8 - 1 female (JHC); SOUTH ESSEX (18): Bradwell-on-Sea, 8.11 - 3 male; 9.11 - 1 female; 10.11 - 1 male (AJD); 8.11 - 1 male; 10.9 - 1 female; 11.11 - 1 male & 3 female; 12.9 - 2 male & 1 female (SD); Dovercourt, 11.11 (M.E. Anthony); BUCKINGHAMSHIRE (24) Willen, Milton Keynes, 11.11 (GEH); WARWICKSHIRE (38): Charlecote, 23.10 (DB); 12.11 - 2 (AG per DB); CARMARTHENSHIRE (44): Betws, 16.7 (BS² per IKM); SHETLAND ISLES (112): Eswick, 23.10 (per MGP).

Summary: (1): 28; (3): 2; (9): 8; (10): 7; Sussex, Brighton: 1; (11): 5; (13): 11; (14): 7; (15): 45; (17): 1; (18): 15; (24): 1; (38): 3; (44): 1; (113): 1.

Spanish Carpet *Scotopteryx peribolata* (Hübner) [I] EAST KENT (15): Greatstone, 6.9 - 1 male (BB per SPC).

[Cypress Carpet Thera cupressata (Geyer) [R(i)]

DORSET (9): Durlston, undated (P. Bell per RP); undated (RC per RP); locality not given, 15.10 - 1 male (Porter 1995a); ISLE OF WIGHT (10): Freshwater, 20.10 (SAKJ); 11.7; 13.7; 24.11 - 2; 26.11 (DBW per SAKJ).]

Lunar Thorn Selenia lunularia (Hübner) [I?/V?]

ISLE OF WIGHT (10): Binstead, 2.8 (BJW per Knill-Jones (1995b)).

Feathered Beauty *Peribatodes secundaria* ([Denis & Schiffermüller]) [I?/V?] EAST KENT (15): Greatstone Dunes, 14.7 (BFS & SPC).

Lydd Beauty P. ilicaria (Geyer) (=manuelaria (Herrich-Schäffer)) [I]

EAST KENT (15): New Romney, 4.8 - 1 female (KR per SPC, see also Clancy (1995b)).

SPHINGIDAE

Convolvulus Hawk-moth Agrius convolvuli (Linnaeus) [I]

WEST CORNWALL (1): Cadgwith, 31.8 - 2 males (JHC); Camborne, 24.8 - 1 female (Mrs B. Langdon per Tremewan (1994)); St. Agnes, Isles of Scilly, 1.9; 4.9 - 2; 6.9 - 2; 7.9 - 3 (JH & MH); SOUTH SOMERSET (5): West Luccombe, Porlock, 1.9 (JR); DORSET (9): Portland Bird Observatory, 4.8 (MC); West Bexington, 23.8; 29 to 31.8 - 3; 14.9 (per PD); Woolgarston, Corfe Castle, 14.9 (DB²); ISLE OF WIGHT (10): Binstead, 18.9 - 1 found dead; 13.9 - 1 at tobacco flowers; 20.9 - 1 at red geranium flowers; 22.9 (BJW); SOUTH HAMPSHIRE (11): Beaulieu, 15.9 (BIJ per BG); WEST SUSSEX (13): Upper Beeding, 8.9 - 1 beaten down by heavy rain while feeding at buddleia (S. Webster per CRP); Walberton, 25.8 (JTR per CRP); EAST SUSSEX (14): Icklesham, 31.8 (IH per CRP); Peacehaven, 8.9 - 1 at rest on car wheel-hub (per CRP); 14.9 - 1 male (CRP); EAST KENT (15): Dungeness Bird Observatory, 23.8; 6.9 (per SPC); Folkestone, 25.8 (TR); Lydd, 21.9; 23.10 (KR per SPC); Sholden, Deal, 17.9 (at window) (TB); SOUTH ESSEX (18): Bradwell-on-Sea, 29.8 - 1 male; 6.9 - 1 male; 28.9 - 1 male (AJD); 13.9 - 1 female (SD); EAST NORFOLK (27), Cley, 4.9 (MT per DB); SOUTH LINCOLNSHIRE (53): Sleaford, 24.9 (P. Cawdell per RJ); NORTH LINCOLNSHIRE (54): Dalby, 3.10 (MED per RJ); Grebby, 7.9 (WGH per RJ); Roughton, 30.8 (K. Robertson per RJ); SOUTH-EAST YORKSHIRE (61): Spurn Head, 4.9 (PAC); ORKNEY ISLANDS (111): Herston, South Ronaldsay, 26.8 (Gauld 1995); Tankerness, 11.9 (Gauld 1995); SHETLAND ISLES (112): Yell, Burravoe, 25.8 (per MGP); North Roe, Isbister, 9.9 (per MGP); EAST CORK (H5): Whitechurch, 17.10 - 1 on clothes line (T. O'Byrne per KGMB).

Summary: (1): 11; (5): 1; (9): 7; (10): 3; (11): 1; (13): 2; (14): 3; (15): 6; (18): 4; (27): 1; (53): 1; (54): 3; (61): 1; (111): 2; (112): 2; (H5): 1.

Death's-head Hawk-moth Acherontia atropos (Linnaeus) [I]

WEST SUSSEX (14): Arundel, 14.8 - 1 larva (T. Vanstone per CRP); EAST KENT (15): Dungeness Bird Observatory, 18.9 - 1 male (per SPC); HERTFORDSHIRE (20): Green Tye, 27.8 - large caterpillar on potato; 3.10 - 3 pupae; over following 2 weeks - 54 pupae found or reported

(Wilson 1995); OXFORDSHIRE (23): East Hendred, 24.8 - 2 fully fed larvae on *Jasminum officinale* (J. Hill per Owen (1995a)); NORTH LINCOLNSHIRE (54): Alkborough, 5.10 (G. Askew per RJ); Melton Ross Pit, 22.9 (K. Skelton per RJ).

Humming-bird Hawk-moth Macroglossum stellatarum (Linnaeus) [I/R(t)?/R?]

Summary only: The vice-county number is given in brackets, followed by the number of individuals sighted in each vice-county. Where no numbers were given for an individual record, it was taken to be one. For some records the numbers given were approximate, therefore the totals given below are approximate and serve to give an indication of numbers recorded. This is followed by the monthly representation of the records. In a few cases it was impossible to assign a given record to an individual month. These records were ignored. As with the totals for the vice-counties, the monthly totals are approximate.

Cornwall, Pendower: 1; Truro area: 1+; (1): 33+ (+1 larva); (2): 12; (3): 19; (5): 3; (6): 11; (8): 1; (9): 17; (10): 15; (11): 1; (12): 3; Sussex, Brighton: 1; (13): 46; (14): 66+; (15): 35 (+larvae); (16): 2; (18): 42; (24): 2; (25): 1; (28): 1 larva; (29): 1; (31): 7; (33): 6; (34): 1; (38): 3; (41): 1; (44): 4; (54): 4; (56): 2; (57): 2; (58): 2; (61): 5; (68): 4; (71): 1; (72): 1; (94): 1; (111): 1; (112): 3; (113): 2; (H3): approx. 35; (H4): 2; Co. Galway, Gortnaclogh: 1 larva; (H20): 1.

May: 1; June: 49+; July: 85 (+larvae); August: 74+ (+1 larva); September: 163+; October: 24.

Earliest date: 2.5, St. Agnes, Isles of Scilly, West Cornwall (1) (JH & MH).

Latest date: 23.10, Whinspit, Dorset (9) (SC per SAKJ).

Spurge Hawk-moth Hyles euphorbiae (Linnaeus) [I]

EAST SUSSEX (14): St. Leonards near Hastings, 22.8 - 1 full-fed larva (K.C. Pierce per CRP); LEICESTERSHIRE (55): Normanton-on-Soar, Loughborough, 9 - 1 dead in a garage (C. Wild).

Bedstraw Hawk-moth H. gallii (Rottemberg) [I]

WEST CORNWALL (1): Penhale sands, 8.9 - 1 full-grown larva (Mrs M. Atkinson per Dr F. Smith); EAST SUFFOLK (25): Dunwich, 23.7 to 25.7 (P. Batty per CRP per BFS); EAST GLOUCESTERSHIRE (33): Toddington Garden Centre, 3.9 - feeding on honeysuckle (Miss H.M. Caddick per RG).

Striped Hawk-moth H. livornica (Esper) [I]

EAST SUSSEX (14): Peacehaven, 5.5 (CRP); WARWICKSHIRE (38): Knowle, nr. Solihull, 26.11 (A.W. Divett per Waring (1995)).

Silver-striped Hawk-moth Hippotion celerio (Linnaeus) [I]

ISLE OF WIGHT (10): Bonchurch, 16.8 (JH² per BFS).

LYMANTRIDAE

Gypsy Moth Lymantria dispar (Linnaeus) [I]

SOUTH DEVON (3): Plymouth, 10.8 - 1 male (R.F. McCormick per BFS); SOUTH HAMPSHIRE (11): New Forest, 5.8 - 1 male (D. Young per BFS); EAST KENT. (15): Dungeness Bird Observatory, 4.8 - 1 male (per SPC).

ARCTIIDAE

Dotted Footman *Pelosia muscerda* (Hufnagel) [I] EAST KENT (15): Dymchurch, 16.7 (JO per BFS); Kingsgate, 31.7 (Harman 1995).

Hoary Footman *Eilema caniola* (Hübner) [I?/V?] DORSET (9): Portland Bird Observatory, 4.8 (MC).

Pigmy Footman E. pygmaeola (Doubleday) [I?/V?]

Note: Subspecies not recorded. DORSET (9): Portland Bird Observatory, 11.8 (MC).

Four-spotted Footman Lithosia quadra (Linnaeus) [I]

ISLE OF MAN (71): Ballaglass, 4.8 (L. Kneal per GDC).

Jersey Tiger Euplagia quadripunctaria (Poda) [I?/R(t)?/V?]

DORSET (9): Portland Bird Observatory, 11.8 (MC); Wimborne, 22.8 - 1 ab. *lutescens* (MB); ISLE OF WIGHT (10): Bonchurch, 13. 8; 20.8 (SAKJ).

Scarlet Tiger Callimorpha dominula (Linnaeus) [I?/V?]

EAST KENT (15): Sandwich Bay Bird Observatory, 27.6; 1.7 (ACJ).

NOLIDAE

Kent Black Arches Meganola albula ([Denis & Schiffermüller]) [I?/V?]

OXFORDSHIRE (23): Hartslock Nature Reserve, Goring, 29.6 (CMR, see also Raper (1995a & 1995b)); NORTH LINCOLNSHIRE (54): Gibraltar Point NNR, 22.7 (DB per RJ).

Scarce Black Arches Nola aerugula (Hübner) [I]

EAST SUSSEX (14): Rye Harbour, 31.7 (DJF per CRP); EAST KENT (15): Greatstone, 12.7 (BB per SPC); Dymchurch, 15.7 (JO per BFS).

NOCTUIDAE

Coast Dart *Euxoa cursoria* (Hufnagel) [I?/V?] EAST KENT (15): Kingsgate, 13.8 (Harman 1995).

Great Dart Agrotis crassa (Hübner) [I]

DORSET (9): Portland Bird Observatory, 4.8 (MC).

Pale Shining Brown Polia bombycina (Hufnagel) [I]

EAST KENT (15): Greatstone, 25.6 (BB per SPC).

White Point Mythimna albipuncta ([Denis & Schiffermüller]) [I]

WEST CORNWALL (1): Cadgwith, 31.8 - 2; 1.9; 2.9 (JHC); St. Agnes. Isles of Scilly, 9.7; 13.8; 14.8; 18.8 - 2 (JH & MH); EAST CORNWALL (2): Portwrinkle beach, 15.7 (AS); DORSET (9): Durlston Country Park, 3.8; 5.8; 1.10 (RP); Portland Bird Observatory. 13.6; 3.8; 5.8; 29.8 (MC); West Bexington, 22.6; 28.6 (per PD); Woolgarston, Corfe Castle, 17.9; 19.9; 23.9 (DB²); ISLE OF WIGHT (10): Niton, 1.7 (AW per SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, 19.6; 24.9 (BIJ per BG); Titchfield Haven, 13.9 (PMP per BG); WEST SUSSEX (13): Pagham Harbour, 11.8 (BFS); Walberton, 31.7; 10.8; 11.11 (JTR per CRP); EAST SUSSEX (14): Icklesham, 31.8 (IH per CRP); Peacehaven, 6.8 (CRP): EAST KENT (15): Dungeness, 12.9 - 4 (BFS); 28.6; 4.8; 5.8; 5.9 (KR per SPC); 1.6; 5.8; 6.9 (SPC); 21.8 - 2; 5.9; 13.9 - 3 (TR); Dungeness Bird Observatory, 25.6; 5.8 - 2; 30.8 (per SPC); Littlestone, 25.6 (KR per SPC): Lydd, 28.6 (KR); New Romney, 11.9 (KR per SPC); Whitstable, 12.8 (Bradford 1995a); WEST KENT (16): Tonbridge, 24.6 (Anon.); SURREY (17): Lingfield, 16.8 (JHC); SOUTH ESSEX (18): Bradwell-on-Sea, 5.8 - 1 male; 9.9 - 1 male (AJD); 4.9 - 1 female (SD); OXFORDSHIRE (23): Fyfield, 28.7 (D. Coulson per M. Townsend).

Summary: (1): 9; (2): 1; (9): 12; (10): 1; (11): 3; (13): 4; (14): 2; (15): 25; (16): 1; (17): 1; (18): 3; (23): 1.

Delicate M. vitellina (Hübner) [I]

WEST CORNWALL (1): Cadgwith, 29.8 - 2 males; 31.8 - 12; 1.9 - 5; 2.9 - 4 (JHC); Cusgarne, 21.5; 22.5 (AS); Lizard Point, 10.10; 21.10 - 2 (MT per DB); Poltesco, 16.5 - 1 male (APF); Praze-an-Beeble, Cambourne, 31.8; 11.10 (AS); St. Agnes, Isles of Scilly, 25.4; 30.4; 1.9; 4.9; 6.9 - 3; 7.9 - 2; 13.9; 18.9; 20.9; 28.9; 8.10 - 3; 9.10 - 5; 11.10 - 12; 12.10 - 8; 13.10 - 6; 14.10 - 4; 16.10 - 3; 2.11 (JH & MH); The Lizard, 19.9; 20.9 (DB); SOUTH DEVON (3): East Prawle, 25.9; 28.9; 29.9; 30.9 (BRB); DORSET (9): Durlston Country Park, 27.9; 7.10; 10.10; 4.11; 25.11;

26.11 - 3; 29.11 (RP); Portland Bird Observatory, 6.9 to 20.10 - 15 (MC); Swanage, 10.10; 11.10; 5.11 (DB); West Bexington, 28.6 (per PD); Woolgarston, Corfe Castle, 11.5; 7.6; 19.9 (DB²); ISLE OF WIGHT (10): Binstead, 12.10; 13.10 (BJW); Chale Green, 24.9; 25.9; 24.10; 5.11 (SC per SAKJ); Freshwater, 24.10 (SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, 25.7; 20.9; 16.10 (BIJ per BG); Brockenhurst, 15.10 (JEC); Sparsholt, 12.9; 14.9 (RAB); WEST SUSSEX (13): Walberton, 13.9; 14.9; 3.11; 7.11 (JTR per CRP); EAST SUSSEX (14): Icklesham, 25.6 (IH per CRP); Peacehaven, 19.11 (CRP); EAST KENT (15): Densole, 14.8 (TR); Dungeness, 14.9 (KR per SPC); Dungeness Bird Observatory, 21.9 (per SPC); Greatstone, 14.9; 20.9; 12.10 (BB per SPC); Lydd, 11.9; 12.9 (KR per SPC); New Romney, 25.9; 29.9; 19.10; 5.11 (KR per SPC); Sandwich Bay Bird Observatory, 23.10 (ACJ); SOUTH ESSEX (18): Bradwell-on-Sea, 11.9 (AJD); CHANNEL ISLANDS (113): Guernsey, L'Ancresse, 17.6 (Austin 1994); Guernsey, St. John, 29.9 (Austin 1994).

Summary: (1): 88; (3): 4; (9): 22; (10): 7; (11): 6; (13): 4; (14): 2; (15): 13; (18): 1; (113): 2.

White-speck *M. unipuncta* (Haworth) [I]

WEST CORNWALL (1): Cadgwith, 31.8 - 1 female (JHC); Praze-an-Beeble, Camborne, 13.12; 14.12 (AS); St. Agnes, Isles of Scilly, 28.2; 13.8; 7.9; 18.9 - 2; 25.9; 27.9; 29.9; 9.10; 11.10; 13.10; 16.10 - 3; 28.10; 2.11; 11.11; 15.11 - 2; 22.11 - 4; 24.11 - 3; 25.11 - 4; 27.11 - 5; 30.11 (JH & MH); SOUTH SOMERSET (5): West Luccombe, Porlock, 21.4 (JR); DORSET (9): Durlston Country Park, 26.11; 27.11 - 3; 28.11 - 2 (RP); Portland, 15.9 (per PD); Portland Bird Observatory, 18.4; 16.9; 8.10; 10.11; 26.11 (MC); Woolgarston, Corfe Castle, 23.11 (DB²); ISLE OF WIGHT (10): Freshwater, 25.11; 27.11 (SAKJ); WEST SUSSEX (13): Wick, Littlehampton, 11.12 (R. Pratt per CRP); EAST SUSSEX (14): Peacehaven, 19.11 (CRP); EAST KENT (15): Lydd, 11.11 (KR per SPC).

Summary: (1): 39; (5): 1; (9): 13; (10): 2; (13): 1; (14): 1; (15): 1.

The Cosmopolitan M. loreyi (Duponchel) [I]

WEST CORNWALL (1): Cadgwith, 2.9 - 1 male (JHC); SOUTH DEVON (3): East Prawle, 26.9 (BRB); DORSET (9): Portland Bird Observatory, 4.11 (MC); ISLE OF WIGHT (10): Bonchurch, 23.10 (JH² per BFS); SURREY (17): Buckland, Betchworth, 6.11 (CH); NORTH LINCOLNSHIRE (54): Gibraltar Point NNR, 22.7 (P. Sharp per DB).

Water Betony Shargacucullia scrophulariae ([Denis & Schiffermüller]) [I]

DORSET (9): Durlston Head, 18.5 - 1 male (JHC).

Red Sword-grass Xylena vetusta (Hübner) [I]

DORSET (9): West Bexington, 18.4 (per PD); NORTH LINCOLNSHIRE (54): Scotton Common, 26.8 (RJ, WJJ, A. Credland & A.T. McGowan per RJ).

Sword-grass X. exsoleta (Linnaeus) [I?/R?]

SOUTH DEVON (3): Yarner Wood, 7.7 (McCormick 1997).

Flame Brocade Trigonophora flammea (Esper) [I]

DORSET (9): Durlston, 4.11, 5.11 (H. Murray per DB).

The Orache Trachea atriplicis (Linnaeus) [I]

EAST KENT (15): Densole, 3.7 - 1 male (TR); CHANNEL ISLANDS (113): Guernsey, L'Ancresse, 16.7 (Austin 1994).

Angle-striped Sallow *Enargia paleacea* (Esper) [I] SURREY (17): Pirbright, 16.7 (GAC).

The Concolorous Chortodes extrema (Hübner) [I?/V?]

EAST KENT (15): Sandwich Bay Bird Observatory, 1.7 (conf. by genitalia examination) (ACJ).

Blair's Wainscot Sedina buettneri (Hering) [I]

NORTH ESSEX (19): Frinton-on-Sea, 16.10 (Ms B. Lock per Firmin (1995)).

Vine's Rustic *Hoplodrina ambigua* ([Denis & Schiffermüller]) [I?/V?] SOUTH-EAST YORKSHIRE (61): Spurn Head, 16.8 (BS).

Small Mottled Willow Spodoptera exigua (Hübner) [I]

WEST CORNWALL (1): Cadgwith, 29.8 - 1 male (JHC); Praze-an-Beeble, Camborne, 29.9; 3.10: 15.10: 16.10 (AS): St Agnes, Isles of Scilly, 26.6; 3.7 - 2; 6.7 - 2; 9.7 - 2; 10.7 - 10; 12.7 - 3; 14.7; 16.7 - 4; 25.7; 5.8 - 3; 6.8 - 3; 8.8; 12.8 - 2; 13.8 - 6; 14.8 - 4; 18.8 - 3; 20.8 - 2; 29.8; 1.9; 4.9 - 3; 6.9; 24.11 (JH & MH); 22.8 (RJH); SOUTH DEVON (3): Abbotskerswell, 10.7 (BPH); Starcross, 5.8; 6.8; 7.8; 14.8 - 2; 15.8; 9.9; 10.9; 11.9 (AHD); Teignmouth, undated (McCormick 1995); SOUTH WILTSHIRE (8): Pepperbox Hill, 2.7 (A. Pickles per Waring (1994a)); DORSET (9): Locality not given, 12.7 (per PD) [maybe a duplicate of other records listed]; Durlston Country Park, 5.8; 6.8 (RP); Gaunt's Common, 28.6 (per PD); Lyme Regis, 2.7 (BPH); Oaker's Wood, 1.7 (per PD); Portland Bird Observatory, 1.7 to 3.9 - 27 (peaks of 3 on 2.7 and 3.7) (MC); ISLE OF WIGHT (10): Binstead, 23.8; 27.8 (BJW); Brook Down, 12.8 (SC per SAKJ); Chale Green, 22.8 - 2; 23.8 - 3; 3.9 (SC per SAKJ); Freshwater, 19.8 (SAKJ); SOUTH HAMPSHIRE (11): Beaulieu, undated - few (BlJ per BG); Brockenhurst, 16.8 (JEC); Keyhaven, undated (Scanes 1995); Sparsholt, 31.7; 6.8; 7.8; 10.8; 11.8; 17.8 - 3; 19.8 - 3; 23.8; 26.8; 27.8; 1.9; 3.9; 7.9; 12.9 (RAB); Timsbury, undated (DT per BG); Titchfield Haven, 1.6 (PMP per BG); NORTH HAMPSHIRE (12):Greywell Moors Reserve, Odiham, 16.8 (AHD); WEST SUSSEX (13): Pagham Harbour, 11.8; 23.8 - 4 (BFS); Walberton, 24.7; 31.7; 16.8; 22.8; 25.8 - 2; 26.8; 29.8; 30.8; 4.9 (JTR per CRP); EAST SUSSEX (14): Icklesham, 2 probably in 8 (IH per CRP); Norman's Bay, undated (Simmons 1995a); Peacehaven, 26.7; 27.7 - 3; 28.7 - 3; 29.7; 30.8; 31.8: 5.9; Ringmer, 16.8 (A. Batten per CRP); EAST KENT (15): Dungeness, 5.9 (KR per SPC); 13.9 -1 male (TR); Dungeness Bird Observatory, 21.7; 20.8; 29.8 (per SPC); Dymchurch, 2.8; 6.8; 27.8 - 2 (JO per BFS); Greatstone, 19.8; 29.8 (BB per SPC); Littlestone, 11.8 (KR per SPC); Lydd, 5.8 (KR per SPC); Newington, Sittingbourne, 23.9 (R.E. & C.G. Lane); New Romney, 4.8; 11.9 (KR per SPC); SURREY (17): Buckland, Betchworth, 12.11 (CH); Tolworth, undated (Scanes 1995); SOUTH ESSEX (18): Bradwell-on-Sea, 26.8 (AJD); 27.7; 31.8; 23.8 (SD); OXFORDSHIRE (23): Long Wittenham, Abingdon, 1.7; 26.7; 11.8; 20.8 (DO); WARWICKSHIRE (38): Charlecote, 18.8; 20.8 (DB); Rugby, 22.8 (P.E. Nicholas per DB); ISLE OF MAN (71): Ballaugh Curraghs, 28.6 (Dr Wallace per GDC); Castletown, 23.8 (GDC); DUMFRIESSHIRE (72): Connansknowe, Kirkton, 8.8 (RM & BM).

Summary: (1): 63; (3): 11; (8): 1; (9): approx. 32; (10): 10: (11): 23+; (12): 1; (13): 15; (14): 15; (15): 16; (17): 2; (18): 4; (23): 4; (38): 3; (71): 2; (72): 1.

Scarce Bordered Straw Heliocoverpa armigera (Hübner) [I]

WEST CORNWALL (1): St. Agnes, Isles of Scilly, 1.7; 16.7; 11.10 (JH & MH); SOUTH DEVON (3): [Abbotskerswell, 30.10 - 1 larva which had been feeding in the flower buds of carnations bought in a shop in Newton Abbot on 1.10 (BPH)]: East Prawle, 25.9; 26.9; 27.9 (BRB); DORSET (9): Locality not given, 30.7 - 2; 19 to 23.11 - 1 (per PD) [some maybe duplicates of other records listed]; Durlston Country Park, 27.9; 1.10 (RP); Gaunt's Common, 14.7 (per PD); Portland Bird Observatory, 26.9 to 30.9 - 14 (peak of 8 on 26.9); 23.10; 11.11 (MC); West Bexington, around 24.9 (per PD); ISLE OF WIGHT (10): Binstead, 28.9 (BJW); Freshwater, 14.10 (SAKJ); SOUTH HAMPSHIRE (11): Christchurch, 27.9 (Jeffes 1996); Titchfield Haven, 1.9 (Waring 1994b); WEST SUSSEX (13): Pagham Harbour, 30.8 (SC² per CRP); Walberton, 3.8; 21.10 (JTR per CRP); EAST SUSSEX (14): Crowborough, undated (Simmons 1995a); EAST KENT (15): Dungeness, 12.9 (BFS); Dungeness, 20.10 (KR per SPC); 31.8; 20.10 (SPC); Dungeness Bird Observatory, 29.9; 11.11 (per SPC); Greatstone. 24.9 (RET per SPC); Sholden, Deal, 21.8 (TB); Westbere, 2.10 (Harman 1995): SURREY (17): Lingfield, 4.9 (JHC); SOUTH ESSEX (18): Bradwell-on-Sea, 13.8; 16.8; 9.9; 10.9; 14.9 (AJD); [BERKSHIRE (22): Slough, undated - larva which probably emanated from a bunch of chrysanthemums in the house (Haywood 1995)]: WARWICKSHIRE (38): Charlecote, 28.9 (AG per DB).

Summary: (1): 1; (3): 1 ([+1 larva]); (9): 23; (10): 2; (11): 2; (13): 3; (14): 1; (15): 9; (17): 1; (18): 5; [(22): 1 larva]; (38): 1.

Marbled Clover Heliothis viriplaca (Hufnagel) [I?/V?]

SOUTH HAMPSHIRE (11): Sparsholt, 6.8; 7.8; 17.8 (RAB); Timsbury, undated (DT per BG); NORTH ESSEX (19): Saffron Walden, 6.8 (Emmet 1995); HERTFORDSHIRE (20): Rushy Mead Nature Reserve, nr. Bishop's Stortford, 6.8 (Plant 1995).

Bordered Straw H. peltigera ([Denis & Schiffermüller]) [I]

WEST CORNWALL (1): Cadgwith, 31.8 - 2 males (JHC); St. Agnes, Isles of Scilly, 19.5 (JH & MH); SOUTH DEVON (3): Dunsford, 11.8 (JW & JW²); East Prawle, 26.9 (BRB); Exeter, 1.9 (P. Butter); Plympton, 6.7 (RJH); Teignmouth, undated (McCormick 1995); SOUTH SOMERSET (5): Haselbury Plucknett, 25.6 (M. Elvidge per KB); Stoke Trister, 5.5 (JB per Waring (1994a)); NORTH SOMERSET (6): Ashcott, 10.5; 9.7; 31.7 (J. C. Lidgate per KB); Westonzoyland, 3.9 (DM per KB); DORSET (9): Locality(s) not given, 3 to 21.7 - 14 (4 on 12.7) (per PD) [some maybe duplicates of other records listed]; Cheyne Weares, Portland, 28.6 - 1 by day (MC); Gaunt's Common, 1.6; 3.7 (per PD); Portland, 5.8 (BFS); Portland Bird Observatory, 10.7 to 26.9 - 14 (MC); Woolgarston, Corfe Castle, 4.7 - 2; 7.7; 9.7 - 2; 12.7 - 3; 15.7; 20.7 (DB²); ISLE OF WIGHT (10): Binstead, 8.7; 17.7; 26.8; 27.8 (BJW); Brownwich, 10.8 (RJD per BG); Chale Green, 30.7 (Colenutt 1995); 12.8 (SC per SAKJ); SOUTH HAMPHIRE (11): Beaulieu, 3.8 (BIJ per BG); Chandlers Ford, 22.8 (BG); Chilling, 3 to 14.7 - 6; 3.8 (per BG); Christchurch, 7.6 (per PD); Fareham, 7.5; 13.6; 2.7; 12.7 (per BG); Hengistbury Head, 29.9 (Jeffes 1996); Hythe, 1.6; 26.9 - at flowers in garden (I.W. Staples per BG); Sparsholt, 7.8 (RAB); Titchfield Haven 17.5; 30.6 (PMP per BG); NORTH HAMPSHIRE (12): Farnborough, 16.7 (per BG); 7.9 (RWP); WEST SUSSEX (13): Woods Mill, Henfield, 5.8 (DD per CRP); Pagham (east side), 4.8 - 40 larvae (JHC); Pagham Harbour, 11.8 - 3 (BFS per CRP); Walberton, 3.6; 3.8; 21.9; 26.9; 27.9; 28.9 (JTR per CRP); EAST SUSSEX (14): Crowborough, 15.6; 7.7; 7.8 (Simmons 1995a); Icklesham, 25.6 (IH per CRP); Peacehaven, 2.6 (CRP); Rye, 2.8 (DJF per CRP); EAST KENT (15): Densole, 30.7; 5.8; 7.8; 31.8; 13.9 (TR); Dungeness, 15.7; 25.7; 28.7; 5.8; 14.9 (KR per SPC); 5.8; 8.8; 4.9 (SPC); 1.9 - 6 larvae; 5.9 - 15 larvae; 12.9 - 2 larvae; 14.9 - 3 larvae; 11.10 - 1 larva (all feeding on sticky groundsel) (TR); Dungeness Bird Observatory, 8.6; 13.6; 25.6 - 2; 2.7; 3.7; 10.7; 13.7; 20.7; 24.7; 31.7; 2.8 - 2; 3.8; 10.8 - 2; 20.8; 22.8 - 2; 27.8; 3.9; 5.9 (per SPC); Folkestone, 24.9 (GAC); Folkestone Warren, 10.9 -2 larvae (one parasitized) (TR); Greatstone, 5.7; 6.7; 23.7; 27.7; 5.9 (BB per SPC); Littlestone, 3.8; 8.8 (KR per SPC); Lydd, 29.6; 14.7 (KR per SPC); New Romney, 1.6; 3.7; 10.7; 13.7; 24.7; 3.8; 4.8 (KR per SPC); Sholden, Deal, 30.6; 4.8; 8.8; 18.8; 22.8; 26.8; 27.8 (TB); Sandwich Bay Bird Observatory, 28.8; 12.9 (ACJ); WEST KENT (16): Tonbridge, 7.6 (Anon.); SURREY (17): Buckland, Betchworth, 2.7 - 3; 4.8; 7.8 (CH); Walworth, 17.10 (G. Martin); SOUTH ESSEX (18): Bradwell-on-Sea, 11.7; 4.8; 12.8; 25.8 (AJD); 3.8; 6.8 (SD); BERKSHIRE (22): Mortimer West End, Reading, 29.6; 3.7; 6.7 (GD); Purley-on-Thames, Reading, 7.9 (CMR, see also Raper (1995b)); OXFORDSHIRE (23): Henley-on-Thames, 5 - 1 female (Wedd 1995); Long Wittenham, Abingdon, 19.7; 5.8; 10.8; 26.8; 29.8; 30.8; 12.9; 22.9 (DO); BUCKINGHAMSHIRE (24): Chesham Bois, 26.8 (JEC & Ms J.M. Spence); Willen, Milton Keynes, 3.7; 5.8 (GEH); Turville Heath, undated (Harman 1995); EAST SUFFOLK (25): Dunwich Beach, 4.7 (BLS); EAST NORFOLK (27), Cley, 4.9 (MT per DB); HUNTINGDONSHIRE (31): Locality not given, 8.7; 9.7; 3.8 - 2 (Ms D. Hillier per B. Dickerson); WARWICKSHIRE (38): Charlecote, 1.6 (AG per DB); 10.9; 11.9 (DB); Coventry, 26.8 (A. Kolaj per DB); Hampton Magna, 14.9 (P. Robbins per DB); GLAMORGANSHIRE (41): Horton, 6.8 (IKM & P.M. Pavett); CARMARTHENSHIRE (44): Betws, 25.6 (BS² per IKM); NORTH LINCOLNSHIRE (54): Dalby, 11.6 (MED per RJ); Grebby, 26.8 to 28.8 (WGH per RJ); Hemswell, 4.8 (RJ & WJJ per RJ); North Coates, 4.7 (R. Lorand per RJ); SOUTH-EAST YORKSHIRE (61): Spurn Head, 6.7; 14.7; 17.7; 13.8; 25.8 (BS). Summary: (1): 3; (3): 5; (5): 2; (6): 4; (9): approx. 28; (10): 6; (11): 20; (12): 2; (13): 10 (+40 larvae); (14): 6; (15): 61 (29+ larvae); (16): 1; (17): 6; (18): 6; (22): 4; (23): 9; (24): 4; (25): 1(27): 1; (38): 5; (44): 1; (54): 5; (61): 5.

Silver Barred Deltote bankiana (Fabricius) [I?/V?]

EAST KENT (15): Dover, 13.7 (Harman 1995); Greatstone, 12.7 (BB per BFS); Sandwich Bay, 25.6 (GAC); Sandwich Bay Bird Observatory, 8.7 (ACJ); Whitstable, 14.7 (Bradford 1995a); EAST SUFFOLK (25): Dunwich Forest, 4.7 (BLS).

Pale Shoulder Acontia lucida (Hufnagel) [I]

DORSET (9): West Bexington, 5.8 (R. Eden per Owen (1995b)); EAST KENT (15): Dymchurch, 5.8 (JO per Owen (1995b)).

Golden Twin-spot Chrysodeixis chalcites (Esper) [I]

WEST SUSSEX (13): Walberton, 10.8; 22.8 (JTR per CRP); EAST KENT (15): Dungeness Bird Observatory, 29.9 - 1 female (per SPC); Kingsgate, 14.10 (Harman 1995).

The Ni Moth Trichoplusia ni (Hübner) [I]

DORSET (9): Portland Bird Observatory, 2.8 - 1 male (MC); ISLE OF WIGHT (10): Freshwater, 15.5; 25.11 (SAKJ, see also Knill-Jones (1994)); SOUTH HAMPSHIRE (11): Brockenhurst, 2.12 (JEC).

Dewick's Plusia Macdunnoughia confusa (Stephens) [I] SOUTH ESSEX (18): Clacton, 8.8 (J. Young per BFS).

Clifden Nonpareil Catocala fraxini (Linnaeus) [I] EAST KENT (15): Greatstone, 9 (RET per BFS).

Waved Black Parascotia fuliginaria (Linnaeus) [I?/V?] EAST KENT (15): Sholden, Deal, 10.7 (TB).

Bloxworth Snout Hypena obsitalis (Hübner) [I?/V?] NORTH HAMPSHIRE (12): Selborne, 12.11 - 1 female (AEA, see also Aston (1995)).

ANNEX 2: SELECTED RECORDS OF "COMMONER" SPECIES

This annex gives a very brief summary of the abundance over the year as well as the earliest and latest date for the more frequent immigrant species which are not covered in Annex 1. Other significant records or observations for 1994 which have been received and were not covered in Annex 1, such as large numbers of an individual species or unusual records of resident species which may be the result migrant activity, are also given.

YPONOMEUTIDAE

Plutella xylostella (Linnaeus)

Reported by a comparatively few recorders. Records suggest that although occasionally frequent its numbers where possibly below average. Over the year, a total of 2,531 were recorded at Portland Bird Observatory, Dorset (9) (MC) and 203 were recorded at Peacehaven, East Sussex (14) (CRP).

Earliest date: NORTH HAMPSHIRE (12): Selborne, 28.4 (AEA).

Latest date: NORTH HAMPSHIRE (12): Selborne, 30.11 (AEA).

Other significant records: WEST CORNWALL (1): Cadgwith, 29.8 - 50; 31.8 - 240; 1.9 - 100 (JHC); DORSET (9): Portland Bird Observatory, 24.7 - 821 (MC); Portland, 4.8 - 391 (per PD); EAST KENT (15): Sandwich Bird Observatory, 31.7 - 91 (ACJ); SOUTH-EAST YORKSHIRE (61): Spurn Head, 21.7 - 58; 12.8 - 47 (BS).

PYRALIDAE

Udea ferrugalis (Hübner)

Records suggested a good year for the species, particular in the latter part of the year. It was occasionally seen in numbers and was widely reported. Over the year, a total of 481 were recorded at the Portland Bird Observatory, Dorset (9) (MC), 107 were recorded at Peacehaven, East Sussex (14) (CRP) and 251 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: SOUTH DEVON (3): Abbotskerswell, 28.4 (BPH).

Latest date: ISLE OF WIGHT (10): Freshwater, 16.12 (SAKJ).

Other significant records: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 21.7 - 25; 29.7 - 15; 6.8 - 40; 20.8 - 20; 1.9 -11; 8.10 - 12; 12.10 - 15; 22.10 - 27; 2.11 - 20; 5.11 - 37; 21.11 - 20; 24.11 - 114; 27.11 - 56 (JH & MH); DORSET (9): Durlston Country Park,; 26.11 - 35 (RP); Portland Bird Observatory, 29.8 - 24; 4.11 - 30 (MC); Swanage, 10.10 - 12; 15.10 - 30; 5.11 - 70+ (DB); Woolgarston, Corfe Castle, 23.11 - 14 (DB²); ISLE OF WIGHT (10): Chale Green, 26.8 - 15 (SC per SAKJ); SOUTH ESSEX (18): Bradwell-on-Sea, 9.11 - 21 (AJD).

Nomophila noctuella ([Denis & Schiffermüller])

A comparatively good year. Widely reported and occasionally seen in large numbers. Over the year, a total of 3,631 were recorded at the Portland Bird Observatory, Dorset (9) (MC), 543 were recorded at Peacehaven, East Sussex (14) (CRP) and 816 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: SOUTH ESSEX (18): Bradwell-on-Sea, 29.4 (SD).

Latest date: WEST CORNWALL (1): Praze-an-Beeble, Camborne, 15.12 (AS).

Other significant records: WEST CORNWALL (1): Cadgwith, 29.8 - 100; 31.8 - 4,000; 1.9 - 200 (JHC); St. Agnes, Isles of Scilly 6.8 - 63; 13.8 - 131; 1.9 - 172; 8.10 - 83; 22.10 - c.2,000 (reported as 24.11 in Smith (1995)); 28.10 - 40; 5.11 - 52 (JH & MH); DORSET (9): Durlston Country Park, 12.8 - 50+; 6.9 - 28 (RP); Portland, 6.8 - 100 (per PD); Portland Bird Observatory, 29.8 - 312; 4.11 - 309 (MC); Swanage, 10.10 - 30; 15.10 - 20; 5.11 - 70+ (DB); Woolgarston, Corfe Castle, 11.8 - 21 (DB²); ISLE OF WIGHT (1): Chale Green, 11.8 - 102 (SC per SAKJ); Tennyson Down, 13.8 - 6 to 10 rising up out of the grass with every step" (CH); EAST SUSSEX (14): Peacehaven, 19.8 - 32; 9.9 - 109; 14.9 - 59; 4.11 - 15 (CRP); SOUTH ESSEX (18): Bradwell-on-Sea, 13.9 - 27; 14.9 - 45 (AJD); OXFORDSHIRE (23): Long Wittenham, Abingdon, 15.8 - 23; 20.8 - 36; 25.8 - 44; 30.8 - 31 (DO).

PIERIDAE

Large White Pieris brassicae (Linnaeus)

Possibly significant records only: SOUTH DEVON (3): "Exceptional nos. Built up very rapidly in many areas of S. Devon, especially in late summer" (VT); Soar area, late 7 - 1,000+ in 2 to 3 *Brassica* fields, some fields in early 8 (e.g. 6.8) had 10,000+ (VT); DORSET (9): Portland, 27.7 to 29.7 - a "substantial immigration....led to a build-up of many thousands on one weedy field adjacent to West Cliffs" (MC).

Small White Pieris rapae (Linnaeus)

Possibly significant record only: SOUTH DEVON (3): Undated and exact locality not given, "present in many 1000's" (VT).

NYMPHALIDAE

Red Admiral Vanessa atalanta (Linnaeus)

A comparatively good year. Widely reported and occasionally seen in numbers.

Earliest date: DEVON: Exact locality not given, 2.3 (Bowles 1994a).

Latest date: WEST CORNWALL (1): St. Austell, 16.12 (RL); ISLE OF WIGHT (10): Puckpool, Ryde, 16.12 (Knill-Jones 1995a).

Other significant records: WEST CORNWALL (1): St. Austell, "successfully overwintered individual" 20.3 & 11.4; "First immigrant" not until 18.5; 6.8 - 25+; 10.8 - 20+; emigration of 30+ on 2.9; at least 4 individuals appeared to be attempting to overwinter (RL); SOUTH DEVON (3): Berry Head, Brixham, 12.11 - 15+ moving north (VT); Strete Gate, Slapton Sands, peaks of 40 on 5-9.8 (HLOH); DORSET (9): Exact locality not given, larvae discovered, 11.12, (Bowles 1995); Portland, emigration regularly observed between 11.10 and 16.11 (MC); EAST SUSSEX (14): Peacehaven, "Highest numbers ever recorded at Peacehaven (since arrival in 1969)" (CRP); SOUTH ESSEX (18): Bradwell-on-Sea, 30.6 - 20; 27.8 - 20 (AJD); CARMARTHENSHIRE (44):

Cefn Sidan, 23.9 - approx. 50 flying in from the sea in 4 hours (BS² per IKM); NOTTINGHAMSHIRE (56): Spalford Warren, 2.9 - 32 (R. Frost per SW); SOUTH-EAST YORKSHIRE (61): Spurn Head, 30.8 - 35 (BS); WESTMORLAND (69): Grange-over-Sands/Keswick, 31.8 - 200+, with 5-10 per Buddleia bush (A.R. Blears); SHETLAND ISLES (112): 4.7 - "massive influx - records from everywhere in large numbers" (per MGP); Baltasound, 7.9 - 1 larva (R. Mouatt per MGP); Brunt Hamersland, 7.9 - 20 larvae on *Urtica* (per MGP); Eswick, 17.8 - 100 larvae on *Urtica* (per MGP); Fladdabister, 6.9 - larvae on *Urtica* (per MGP); Girlsta, 6.9 - 6 larvae on *Urtica* (per MGP); Nesting, 12.9 - a few larvae on nettle (per MGP); Oxna, 29.8 - 50 larvae on *Urtica* (per MGP); CO. DOWN (H38): Newcastle Harbour, 12.10 - 30 feeding on *Veronica* (Mrs A. McComb per IR).

Painted Lady V. cardui (Linnaeus)

A comparatively good year, though not as frequent as V. *atalanta*. Widely reported and occasionally seen in some numbers.

Earliest date: ISLE OF WIGHT (10): Cranmore, 13.4 (SAKJ).

Latest date: WEST CORNWALL (1): Clodgy Point, 24.12 (per RL); Isles of Scilly, 24.12 (per RL, see also Smith (1995)).

Other significant records: WEST CORNWALL (1): St. Agnes, Isles of Scilly, 24.11 - circa 30 (Smith 1995); St. Mary's, 26.11 - 30/40 in one field of flowering narcissi on (J.W. & P.J. Hale per JH & MH); SOUTH DEVON (3): Strete Gate, Slapton Sands, peaks of 30 in many days in 8 (HLOH); DORSET (9): Portland, 15.8 - more than 70 (MC); EAST SUSSEX (14): "Highest numbers ever recorded at Peacehaven (since arrival in 1969)" (CRP); SOUTH ESSEX (18): Bradwell-on-Sea, 14.8 - 22 (AJD); SHETLAND ISLES (112): Baltasound, 30.8 to 1.9, larvae found (per MGP); Cunningsburgh, 6.9 - larva(e) (per MGP).

NOCTUIDAE

Dark Sword-grass Agrotis ipsilon (Hufnagel)

A comparatively good year. Widely reported and occasionally seen in numbers. Over the year, a total of 731 were recorded at Portland Bird Observatory, Dorset (9) (MC), 8 were recorded at Peacehaven, East Sussex (14) (CRP) and 651 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: ISLE OF WIGHT (10): Freshwater, 8.3 (SAKJ).

Latest date: ISLE OF WIGHT (10): Freshwater, 12.12 (SAKJ).

Other significant records: WEST CORNWALL (1): Cadgwith, 1.9 - 30 (JHC); St. Agnes, Isles of Scilly, 26.8 - 14; 7.9 - 27; 29.9 - 13; 22.10 - 42; 5.11 - 25 (JH & MH): The Lizard, 21.9 -15 (DB); DORSET (9): Durlston Country Park, 5.8 - 18 (RP): Portland Bird Observatory, 10.8 - 66 (MC); SOUTH ESSEX (18): Bradwell-on-Sea, 26.8 - 18; 2.9 - 21; 11.9 - 15; 13.9 - 29; 14.9 - 89; 14.10 - 10; 26.11 (AJD); 13.9 - 21 (SD); SOUTH-EAST YORKSHIRE (61): Spurn Head, 3.9 - 19 (PAC).

Pearly Underwing Peridroma saucia (Hübner)

A fair year, though infrequently seen in any numbers. Over the year, a total of 215 were recorded at Portland Bird Observatory, Dorset (9) (MC); 7 were recorded at Peacehaven, East Sussex (14) (CRP); and 58 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: ISLE OF WIGHT (10): Chale Green, 12.4 (SC per SAKJ).

Latest date: SOUTH ESSEX (18): Bradwell-on-Sea, 12.12 (SD).

Other significant records: WEST CORNWALL (1): Cadgwith, 1.9 - 10 (JHC); DORSET (9): Portland Bird Observatory, 27.9 - 14 (MC).

Silver Y Autographa gamma (Linnaeus)

A comparatively good year. Widely reported and occasionally abundant. Over the year, a total of 3,882 were recorded at Portland Bird Observatory, Dorset (9) (MC), 1,610 were recorded at Peacehaven, East Sussex (14) (CRP) and 8,103 were recorded at Bradwell-on-Sea, South Essex (18) (AJD & SD).

Earliest date: SOUTH DEVON, Plymstock, 13.4 (JHC).

Latest date: SOUTH ESSEX (18): Bradwell-on-Sea, 18.12 (SD).

Other significant records: WEST CORNWALL (1): Cadgwith, 31.8 - 400; 1.9 - 100; 2.9 - 100 (JHC); The Lizard, 19.9 - 180 (DB); SOUTH DEVON (3): Strete Gate, Slapton Sands 10.8 - 500 approx. day-flying individuals "suddenly arrived", similar numbers on 11 to 14.8; 15.8 - 200 approx., similar numbers on 17 to 20.8 after which numbers droped to single figures (HLOH, see also O'Heffernan (1995)); DORSET (9): Durlston Country Park, 12.8 - 2,000 (RP); Portland, 10.8 - many 10s of thousands were present in the afternoon and evening; 10.8 - 1,063 (MC); WEST SUSSEX (13): Pagham Harbour, 3.8 - 150 (DB); EAST SUSSEX (14): Cow Gap, 29.7 - 100 to 200 flying over flowers (MSP); Peacehaven, 10.8 - 158; ("Best season [for gamma] at Peacehaven since 1977"); (CRP); EAST KENT (15): Folkestone Warren, 12.8 - 500+ (TR); 22.8 - 500 (DB); SOUTH ESSEX (18): Bradwell-on-Sea, 29.6 - 265; 13.7 - 214; 3.8 - 322; 10.8 - 201; 15.8 - 502; 18.8 - 211 (AJD); OXFORDSHIRE (23): Long Wittenham, Abingdon, larvae found on Urtica dioica, Cistus sp., Pelargonium, Nicotiana, Origanum and Parsley (DO); WARWICKSHIRE (38): Alveley C.P., 2.9 - 100+ (W. & K. Wheatley); CARMARTHENSHIRE (44): Cefn Sidan, 23.9, estimated at 50/hour coming in off the sea (per IKM); saltmarsh at Penclacwydd, 2.9 approx. 260 at flowers (BS² per IKM); coastal path at Pendine, 17.9 - 300+ (G.S. Motley & Ms J. Murphy per IKM); SOUTH-EAST YORKSHIRE (61): Easington, 14.8 - 750; Spurn Head, 20.8 -"tens of thousands" (BS); Kilnsea/Spurn, 3.7 - 153; 14.8 - 1,000+; 21.8 - 1,000+ (PAC); NORTH NORTHUMBERLAND (68): Farne Islands, 10.9, approx. 150 day-flying individuals (AW); SHETLAND ISLANDS (112): Fair Isle, 7.7, many 1,000s (N. Riddiford).

Initials of recorders

The recorders initials are listed alphabetically so that records can be extracted with relative ease.

AEA	A.E. Aston	DM	D. Miller	MSP	M.S. Parsons
ACJ	A.C. Johnson	DO	D. Owen	MT	M. Tunmore
AG	A. Gardner	DT	D. Thelwell	NB	N. Bowles
AHD	A.H. Dobson	FHNS	Dr F.H.N. Smith	PAC	P. Crowther
AJD	A.J. Dewick	GAC	G.A. Collins	PD	P. Davey
APF	A.P. Foster	GD	G. Dennis	PMP	P.M. Potts
AS	A. Spalding	GDC	G.D. Craine	RAB	R.A. Bell
AW	Mrs A. Wilkinson	GEH	G.E. Higgs	RC	R. Cox
BB	B. Banson	HLOH	H.L. O'Heffernan	RET	R.E. Turley
BRB	B.R. Baker	IH	I. Hunter	RG	R. Gaunt
BC	B. Collins	IKM	I.K. Morgan	RJ	R. Johnson
BES	B.E. Slade	IR	I. Rippey	RJD	R.J. Dickson
BFS	B.F. Skinner	JB	J. Burge	RJH	R.J. Heckford
BG	B. Goater	JEC	J.E. Chainey	RL	R. Lane
BIJ	B. Ivon-Jones	JH	J. Hale	RM	R. Mearns
BJW	B.J. Warne	JH^2	J. Halsey	RP	R. Plowman
BLS	B.L. Statham	JHC	Dr J.H. Clarke	RWP	R.W. Parfitt
BM	B. Mearns	JO	J. Owen	SAKJ	S.A. Knill-Jones
BPH	Dr B.P. Henwood	JR	J. Robbins	SC	S. Colenutt
BS	B. Spence	JTR	J.T. Radford	SC^2	S. Curson
BS^2	B. Stewart	JW	J. Woodland	SD	S. Dewick
CCS	C.C. Smith	JW^2	J. Woodland	SPC	S.P. Clancy
CH	C. Hart	KB	K. Brown	SW	Dr S. Wright
CMR	C.M. Raper	KGMB	K.G.M. Bond	TB	T. Bagworth
CRP	C.R. Pratt	KR	K. Redshaw	TR	T. Rouse
DB	D. Brown	MB	Ms M. Brooks	VT	V. Tucker
DB^2	D. Burt	MC	M. Cade	WGH	W.G. Hoff
DBW	D.B. Wooldridge	MED	Mrs M.E. Dawson	WJJ	Mrs W.J. Johnson
DD	D. Dey	MGP	M.G. Pennington		
DJF	D.J. Furnell	MH	M. Hicks		

Other contributors

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References

- Agassiz, D.J.L., Heckford, R.J. & Langmaid, J.R., 1996. Microlepidoptera review of 1994. *Entomologist's Record and Journal of Variation*, **108**: 177-193.
- Aston, A., 1994. *Rhodometra sacraria* (Linn.) (Lep.: Geometridae) in Hampshire, 1994. *Entomologist's Record and Journal of Variation*, **106**: 195.
- -, 1995. *Hypena obsitalis* (Hb.) the Bloxworth Snout (Lep.: Noctuidae) new to mainland Hampshire. *Entomologist's Record and Journal of Variation*, **107**: 47.
- Austin, R. 1994. Moths and butterflies of Guernsey 1994. La Société Guernesiaise
- Bowles, N., 1994a. Wildlife reports. Butterflies. British Wildlife, 5(5): 322-324.
- -, 1994b. Wildlife reports. Butterflies. British Wildlife, 5(6): 390-392.
- -, 1994c. Wildlife reports. Butterflies. British Wildlife, 6(1): 51-52.
- -, 1994d. Wildlife reports. Butterflies. British Wildlife, 6(2): 119-120.
- -, 1995. Wildlife reports. Butterflies. British Wildlife, 6(3): 186-188.
- Bradford, E.S., 1995a. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, 8: 181.
- , 1995b. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Microlepidoptera. *British Journal of Entomology and Natural History*, 8: 188-189.
- Bradley, J.D. & Fletcher, D.S., 1979. A recorder's log book or label list of British butterflies and *moths*. London, Curwen Books.
- Bristow, R., 1995. The occurrence of the Clouded Yellow (*Colias croceus* Geoffroy) (Lep.: Pieridae) in Devon during 1994. *Entomologist's Record and Journal of Variation*, **107**: 152-153.
- Clancy, S.P. 1995a. A second British record of *Mussidia nigrivenella* Ragonot (Lep.: Pyralidae). *Entomologist's Record and Journal of Variation*, **107**: 146.
- . 1995b. A second British record of *Peribatodes manuelaria* H.-S. (Lep.: Geometridae). *Entomologist's Record and Journal of Variation*, **107**: 98-99.
- , 1995c. Pediasia fascelinella (Lep.: Pyralidae): two more Kentish examples. Entomologist's Record and Journal of Variation, 107: 255.
- Colenutt, S.R., 1995. *Evergestis limbata* (L.) (Lep.: Pyralidae) new to mainland Britain. *Entomologist's Record and Journal of Variation*, **107**: 197.
- Cramp, P.J., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Microlepidoptera. *British Journal of Entomology and Natural History*, **8**: 188.
- Dey, D., 1995. A sighting of the Monarch butterfly, *Danaus plexippus* L. in West Sussex. *Entomologist's Record and Journal of Variation*, **107**: 99.

- Dillon, A.D., 1995. Was 1994 a great Clouded Yellow year? The Bulletin of the Amateur Entomologists' Society, 54: 198.
- Easterbrook, M.A., 1995. Sitochroa palealis (D. & S.) (Lep.: Pyralidae) in Oxfordshire. Entomologist's Record and Journal of Variation, 107: 100.
- Emmet, A.M., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, **8**: 183.
- Firmin, J., 1995. Sedina buettneri (Hering) (Lep.: Noctuidae) in Essex, 1994. Entomologist's Record and Journal of Variation, 107: 43.
- Frost, R.A., 1995. Another Midlands Monarch. The Bulletin of the Amateur Entomologists' Society, 54: 48.
- Gardiner, B.O., 1995. Swallowtails, *Papilio machaon* Linnaeus (Lepidoptera: Papilionidae), in Cambridge. *Entomologist's Gazette*, **46**: 278.
- Gauld, S.V., 1995. Lepidoptera report 1994. Orkney Field Club Bulletin, (1995): 62-65.
- Hancock, E.G., 1996. Scottish insect records for 1994. Glasgow Naturalist, 23(1): 41-43.
- Harman, T.W., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, **8**: 183.
- Harmer, A.S., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British butterflies. *British Journal of Entomology and Natural History*, **8**: 179.
- Haywood, R., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, 8: 183-184.
- Jeffcoate, G. & Gerrard, B., 1995. Surrey (with SW London) branch of Butterfly Conservation. 1994 butterfly report [showing status and distribution]. Chertsey. Butterfly Conservation.
- Jeffes, M., 1995. A third British record of *Etiella zinckenella* Treitschke (1832) (Lepidoptera: Pyralidae) and other migrants from VC11. *Entomologist's Record and Journal of Variation*, **107**: 291-292.
- Karsholt, O. & Razowski, J., 1996. *The Lepidoptera of Europe*. A distributional checklist. Stenstrup, Apollo Books.
- Knill-Jones, S.A., 1994. *Trichoplusia ni* (Hbn.) (Lep.: Noctuidae) a species new to the Isle of Wight. *Entomologist's Record and Journal of Variation*, **106**: 134.
- -, 1995a. Late and partial third broods of butterflies and moths in the Isle of Wight during 1994. *Entomologist's Record and Journal of Variation*, **107**: 171-173.
- -, 1995b. New species of Lepidoptera to the Isle of Wight. *Entomologist's Record and Journal of Variation*, **107**: 76.
- Manning, D., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, **8**: 1835
- McCormick, R., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. British Journal of Entomology and Natural History, 8: 185.
- -, 1997. Some notable Devon Lepidoptera records. Entomologist's Record & Journal of Variation, 109: 23-24.
- O'Heffernan, H.L., 1995. An influx of the Silver Y, Autographa gamma L. (Lep.: Noctuidea) in South Devon. Entomologist's Record and Journal of Variation, 107: 100.
- Owen, D.F., 1995a. Acherontia atropos (Lep.: Sphingidae) breeding in Oxfordshire in 1994. Entomologist's Record and Journal of Variation, 107: 156.
- -, 1995b. Acontia lucida (Hufnagel) (Lep.: Noctuidae) in Kent and Dorset. Entomologist's Record and Journal of Variation, 107: 81.
- Pennington, M.G., 1996. Camberwell Beauties Nymphalis antiopa (L.) (Lep.: Nymphalidae) and Swallowtails Papilio machaon L. (Lep.: Papilionidae) in Shetland. Entomologist's Record and Journal of Variation, 108: 67-68.
- Plant, C., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, **8**: 186.

- Porter, J., 1995a. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, 8: 186.
- , 1995b. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Microlepidoptera. *British Journal of Entomology and Natural History*, **8**: 192.
- Raper, C.M., 1995a. A record of *Meganola albula* D. & S. (Lep.: Nolidae) from Oxfordshire. *Entomologist's Record and Journal of Variation*, **107**: 74.
- -, 1995b. Moth sightings in 1994. The Bulletin of the Amateur Entomologists' Society, 54: 37 & 195.
- Scanes, J.T., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, **8**: 187.
- Simmons, M. 1995a. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. *British Journal of Entomology and Natural History*, 8: 187.
- , 1995b. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Microlepidoptera. British Journal of Entomology and Natural History, 8: 192.
- Skinner, B.F., 1995a. Pyralid moths in profile: Part 1 Sciota adelphella (Fischer von Röslerstam). Entomologist's Record and Journal of Variation, 107: 147-149.
- -, 1995b. Pyralid moths in profile: Part 2 Acrobasis tumidana (Denis & Schiffermüller). Entomologist's Record and Journal of Variation, 107: 241-243.
- Slade, B.E., 1995. The Monarch butterfly (Danaus plexippus L.) in Somerset. Entomologist's Record and Journal of Variation, 107: 99.
- Smith, F.H.N., 1995. Migrant Lepidoptera in Cornwall in 1994. Entomologist's Gazette, 46: 139.
- Sokoloff, P., 1994. A sighting of the Monarch butterfly, Danaus plexippus L. in Kent. Entomologist's Record and Journal of Variation, 106: 248.
- Sparks, T.H., 1995. Unusual observations of the Swallowtail butterfly *Papilio machaon* Linnaeus (Lepidoptera: Papilionidae) in Cambridge. *Entomologist's Gazette*, **46**: 40.
- Sterling, M.J. & Sterling, P.H., 1995. 1994 Annual exhibition. Imperial College, London SW7 -22 October 1994. British Microlepidoptera. British Journal of Entomology and Natural History, 8: 194.
- Tremewan, W.G., 1994. Agrius convolvuli (Linnaeus, 1758) and other immigrants in Cornwall in 1994. Entomologist's Gazette, 45: 250.
- Waring, P., 1994a. Wildlife reports. Moths. British Wildlife, 5(6): 392-393.
- -, 1994b. Wildlife reports. Moths. British Wildlife, 6(2): 120-122.
- -, 1995. Wildlife reports. Moths. British Wildlife, 6(3): 188-190.
- Wedd, D., 1995. 1994 Annual exhibition. Imperial College, London SW7 22 October 1994. British Macrolepidoptera. British Journal of Entomology and Natural History, 8: 187.
- Wilson, D., 1995. A minor infestation of *atropos* (Lep.: Sphingidae) in Hertfordshire, 1994. *Entomologist's Record and Journal of Variation*, **107**: 47-49.

Hilara maura (L.) (Dip.: Empididae) feeding on *Nematopogon swammerdamella* (L.) (Lep.: Incurvariidae)

On 11 June 1995, in a "set-aside" field at Grenzhof, near Heielberg, Baden, Germany I watched at close quarters a male *Hilara maura* copulating with a female which was absorbed in feeding on a silk-wrapped male of *Nematopogon swammerdamella*, a fairly numerous species in the adjacent woodlands. The very long whitish antenna of the moth protruded from the silk - an altogether curious sight.– JOHN F. BURTON, In der Etzweise 2, D-69181 Leimen-St Ilgen, bei Heidelberg, Germany.